

REMARKS

This is a full and timely response to the outstanding non-final Office Action mailed June 20, 2006. Reconsideration and allowance of the application and pending claims are respectfully requested.

I. Claim Rejections - 35 U.S.C. § 102(b)

Claims 1-7, 9-18, 20-22, 24, and 25 have been rejected under 35 U.S.C. § 102(b) as being anticipated by *Ebert, et al.* ("Ebert," U.S. Pat. No. 6,247,078). Applicant respectfully traverses this rejection.

It is axiomatic that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 U.S.P.Q. 303, 313 (Fed. Cir. 1983). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102(b).

In the present case, not every feature of the claimed invention is represented in the Ebert] reference. Applicant discusses the Ebert reference and Applicant's claims in the following.

A. The Ebert Disclosure

Ebert discloses a computer interface assembly 100 for installing in a personal computer. *Ebert*, column 6, lines 55-58. The assembly 100 includes an internal primary logic card 548 to which various external connectors are mounted. *Ebert*, column 8, line 66 to column 9, line 2; Fig. 5. The assembly 100 includes an outer housing 102 that includes a wall surface 108 at a first end through which internal connectors 180 extend. *Ebert*, column 7, lines 1-5; column 10, line 60 to

column 11, line 3. The connectors 180 are adapted to connect to a back plane inside a housing 322 of the personal computer. *Ebert*, column 10, line 60 to column 11, line 3; Fig. 3. At a second end of the housing 102 is a “tailstock 334” through which the aforementioned external connectors extend to enable connection of various separate components to the personal computer when the assembly 100 is installed within the personal computer. *Ebert*, column 8, lines 43-50.

The interface assembly 100 further includes guide rails 212, 214 that enable the assembly to be slid into the housing 322 of the personal computer during installation. *Ebert*, column 8, lines 21-29.

B. Applicant’s Claims

As is noted above, *Ebert* fails to teach several of Applicant’s claim limitations. Applicant discusses some of those claim limitations in the following.

1. Claims 1, 3-5, 7, and 9

Applicant’s claim 1 provides as follows (emphasis added):

1. A circuit board module, comprising:
a circuit board that includes a processor and memory; and
an *external connector panel* that provides *user access to connectors that are mounted to the circuit board when the module is installed in a host computer*, wherein the connector panel and the circuit board are connected together so as to form a single, integrated unit that can be installed in a computer, *the connector panel comprising connection elements that are configured to directly connect the connector panel to a computer chassis.*

Applicant notes in regard to claim 1 that Ebert at least does not teach an “external connector panel” that provides “user access to connectors that are mounted to the circuit board when the module is installed in a host computer” and that comprises “connection elements that are configured to directly connect the connector panel to a computer chassis”. As described above, Ebert teaches a “tailstock 334,” which may be considered an external connector panel through which external connectors pass. As is clear from Ebert’s Figures 2 and 3, however, that tailstock does not include any connection elements that are configured to directly connect the tailstock to a computer chassis, such as the housing 322. Therefore, the Ebert apparatus cannot be said to anticipate claim 1.

In the Office Action, the Examiner identifies the “distribution card 678” as comprising a “connector panel” as recited in claim 1. The distribution card 678, however, is just a card that connects to the primary logic card 548 and is not an “external connector panel”. As mentioned above, Ebert also teaches a “wall surface 108” that is provided on an end of the assembly 100 and faces a back plane of the computer housing 322 to enable connectors 180 to connect to that back plane. That wall surface 108 similarly does not comprise an “external connector panel” that “provides user access to connectors that are mounted to the circuit board when the module is installed in a host computer” as now required by claim 1.

At least in view of the above, Ebert does not disclose each and every limitation of claim 1 and Applicant therefore requests that the rejection of claim 1 and its dependents under the Ebert reference be withdrawn.

With specific regard to dependent claim 3, Applicant notes that Ebert’s primary logic card 548 (motherboard) does not comprise “openings that are adapted to receive fasteners “that are used to secure the circuit board to a computer chassis”. Specifically, although Ebert’s “major wall

surface 106” and “top cover 210” comprise openings that receive fasteners, Ebert’s primary logic card 548 is not shown or described as comprising such openings or receiving fasteners. Furthermore, the fasteners that extend through the major wall surface 106 and the top cover 210 hold the assembly 100 together and do not secure the assembly to the computer chassis 322. That fact is clear from Ebert’s Figure 2, which shows the fasteners facing inward.

Regarding dependent claim 9, Ebert does not teach connection elements provided on the tailstock 334 (external connector panel) that comprise “tabs that are configured for receipt by slots of a computer chassis”. Again, Ebert’s “wall surface 108” is not an external connector panel.

2. Claims 10-13

Applicant’s claim 10 provides as follows (emphasis added):

10. A motherboard module separate from a computer, the module comprising:

a computer motherboard that includes a processor and memory, the motherboard having input/output connectors mounted adjacent a rear edge of the motherboard; and

an *external connector panel* having openings that are configured to receive the input/output connectors mounted to the motherboard so as to provide access to the connectors to a computer user when the module is installed in a host computer, *the connector panel further comprising connection elements that are configured to directly connect the panel to a computer chassis;*

wherein the motherboard and the connector panel are connected together so as to form a single, integrated unit in which the rear edge of the motherboard aligns with the connector panel and the motherboard extends normal from the connector panel.

Regarding claim 10, Ebert at least does not teach an “external connector panel” that comprises “connection elements that are configured to directly connect the panel to a computer chassis” for reasons described above. Therefore, Ebert does not disclose each and every limitation of claim 10 and Applicant requests that the rejection of claim 10 and its dependents under the Ebert reference be withdrawn.

Regarding dependent claim 11, Ebert does not teach a motherboard that comprises “openings that are adapted to receive fasteners that are used to secure the motherboard to a computer chassis” for reasons described above.

Regarding dependent claim 13, Ebert does not teach that connection elements provided on an external connection panel include “tabs that are configured for receipt by slots of a computer chassis” for reasons described above.

3. Claims 14-18 and 20

Applicant’s claim 14 provides as follows (emphasis added):

14. A computer, comprising:
an outer housing;
a chassis mounted within the outer housing; and
a pre-assembled motherboard module that includes a motherboard that is mounted within the chassis and an external connector panel that is accessible from the exterior of the computer, the motherboard and the connector panel being connected together to form a single, integrated unit, the motherboard including a processor, memory, and input/output connectors, *the connector panel providing user access to the motherboard connectors and comprising connection elements that are configured to directly connect the connector panel to the computer chassis.*

Regarding claim 14, Ebert at least does not teach an “external connector panel” that comprises “connection elements that are configured to directly connect the connector panel to a computer chassis” for reasons described above. Therefore, Ebert does not disclose each and every limitation of claim 14 and Applicant requests that the rejection of claim 14 and its dependents under the Ebert reference be withdrawn.

Regarding dependent claim 15, Ebert does not teach a circuit board that comprises “openings that are adapted to receive fasteners that are used to secure the circuit board to the [computer] chassis” for reasons described above.

Regarding dependent claim 20, Ebert does not teach that connection elements include “tabs on one of the connector panel and the chassis and slots on the other of the connector panel and the chassis” for reasons described above.

4. Claims 21, 22, 24, and 25

Applicant’s claim 21 provides as follows (emphasis added):

21. A method of manufacturing a computer, the method comprising:
pre-assembling a motherboard module comprising a motherboard and an
integral external connector panel; and
*installing the motherboard module as a single unit in a computer chassis
by installing the motherboard module into the computer chassis without sliding
the motherboard module into place.*

Regarding claim 21, Ebert explicitly discloses the assembly module 100 as installing within the computer chassis (housing 322) by sliding the module into place. Therefore, Ebert teaches the

opposite of the recited “installing the motherboard module as a single unit in a computer chassis by installing the motherboard module into the computer chassis without sliding the motherboard module into place”. Therefore, Ebert does not disclose each and every limitation of claim 21 and Applicant requests that the rejection of claim 21 and its dependents under the Ebert reference be withdrawn.

Regarding dependent claim 24, Ebert does not teach “attaching the [external] connector panel of the motherboard module to the computer chassis using tabs provided on one of the connector panel and the chassis”. Again, Ebert’s tailstock 334 does not attach to the computer chassis 322 with any tabs.

Regarding dependent claim 25, Ebert does not teach “securing the motherboard to the chassis with threaded fasteners” for reasons described above.

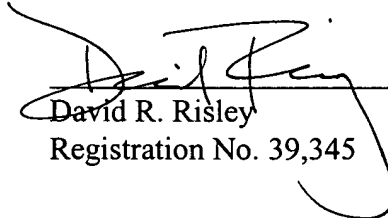
II. Canceled Claims

Claims 2, 6, 8, 19, and 23 have been canceled from the application without prejudice, waiver, or disclaimer. Applicant reserves the right to present these canceled claims, or variants thereof, in continuing applications to be filed subsequently.

CONCLUSION

Applicant respectfully submits that Applicant's pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

Respectfully submitted,



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